

VOLKOV, A.I.

Our objectives for the new year. Vsem.prof.dvizh. no.5:46-47 ly '57.  
(MIRA 10:8)

1.Predsedatel' Gosudarstvennogo komiteta Soveta Ministrov SSSR po  
voprosam truda i zarabotnoy platy.  
(Pages)

1. VOLKOV, A. I.
2. USSR (600)
4. Foresters
7. Leading mechanizers of the Slobodskaya, Livenskay and Sampurskaya forest conservation stations. Les. khoz. 5, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified

USPANOV, U.U., otv. red.; <sup>BOROVSKIY</sup> BOROVSKIY, V.M., red.; VOLKOV, A.I.,  
red.; CHULAKOV, Sh.A., red.; KOROLEVA, I.F., red.; IVANOVA,  
E.I., red.; KHUDYAKOV, A.G., tekhn.red.

[Development of soil science in Kazakhstan] Razvitie pochvo-  
vedeniia v Kazakhstane; trudy. Alma-Ata, Izd-vo Akad. nauk  
Kazakhskoi SSR, 1963. 199 p. (MIRA 16:7)

1. Respublikanskaya konferentsiya pochvovedov, posvyashchen-  
naya 40-letiyu ustanovleniya Sovetskoy vlasti v Kazakhstane i  
obrazovanii Kommunisticheskoy partii Kazakhstana. 3d, Alma-  
Ata, 1960.

(Kazakhstan--Soil science)

BOROVSKIY, V.M.; VOLKOV, A.I.; NOSKOVA, L.V.; ORLOVA, M.A.

Natural regions of Kzyl-Orda Province. Izv. AN Kazakh SSR. Ser.  
bot. i pochv. no. 3:3-28 '62. (MIRA 15:12)  
(Kzyl-Orda Province--Soils)  
(Kzyl-Orda Province--Reclamation of land)

VOLKOV, Aleksandr Ivanovich; BARYSHNIKOV, G.P., red.; SHCHEDRINA, N.L.,  
tekhn. red.

[Associations of collective farms; in questions and answers]  
O mezhkolkhoznykh organizatsiakh; v voprosakh i otvetakh.  
Moskva, Gosizurizdat, 1963. 84 p. (MIRA 16:7)  
(Collective farms--Interfarm cooperation)

ACCESSION NR: AR4039224

S/0270/64/000/004/0039/0039

SOURCE: Ref. zh. Geodeziya. Otd. vy\*p., Abs. 4.52.251

AUTHOR: Volkov, A. I.

TITLE: The new TGO and TGS mine survey theodolites

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 118, 1963, 46-52

TOPIC TAGS: theodolite, surveying, mine surveying, geodesy

TRANSLATION: The author notes the difficulties arising when making mine surveys with a theodolite with an eccentric telescope when the angle of inclination exceeds  $50^{\circ}$ . There is a discussion of the possibility of using a theodolite with a prism attachment and a theodolite with a reflecting attachment (RZh, 1961, 1697) for such a purposes. A description is given of two mine surveying theodolites (TGO and TGS), developed by personnel of the Department of Mine Surveying of Tomsk Polytechnic Institute. The theodolites have

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ACCESSION NR: AR4039224

centrally mounted telescopes. Sighting is possible directly through the circle (in the TCO theodolite circle there are "windows" near the graduations for 90 and 270°; in the TGS theodolite the circle has spokes). Tests of experimental models of the theodolites have revealed that they have a number of advantages over a theodolite with an eccentric telescope; the TGS theodolite was the most convenient to use. V. Sinyagina.

DATE ACQ: 08May64

SUB CODE: AS

ENCL: 00

Card 2/2

KOSAREV, A.I.; KUZNETSOV, A.N.; PRONIN, A.T.; VOLKOV, A.I.

Chuck for mechanical testing of thin-walled tubular specimens.  
Zav. lab. 31 no.11:1416 '65. (MIRA 19:1)

VOLKOV, A.I., inzh.; ZAL'TSMAN, L.I., inzh.; PISARENKO, V.S., inzh.

Highly maneuverable driving part of a trackless manipulator.  
Vest.mashinostr. 46 no.1342-45 Ja '66. (MIRA 1961)

ACC NR: AP6033533

SOURCE CODE: UR/0170/66/011/004/0447/0454

AUTHOR: Volkov, A. I.

ORG: none

TITLE: Dissipation of mechanical energy of subsonic flow of a compressible liquid when the direction of the flow changes

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 4, 1966, 447-454

TOPIC TAGS: compressible fluid, subsonic flow, energy scattering, turbulent flow, fluid viscosity, heat conduction, adiabatic compression, thermodynamic equation

ABSTRACT: The author points out that although the main cause of energy dissipation when flow direction changes, namely turbulization of the stream, has been well investigated in the literature, little attention has been paid to another cause, namely the increase in pressure, which should play a major role in the case of a compressible liquid. The author therefore analyzes the influence of viscosity and heat conduction of a compressible liquid as it becomes decelerated in the zone when the flow direction is reversed, on the dissipation of mechanical energy of the stream. An expression for the dissipation as a function of the pressure ratio is found by analyzing the energy balance on both ends of the stream. The resultant equation is of the Poisson adiabat type, with adiabatic exponent which allows for dissipation process. The change in the parameters of the working body as a result of change in flow direction is evaluated by using the first integrals of the continuity, momentum, and entropy

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UDC: 532.501.312

ACC NR: AF6033533

equations for a plane stationary case. An expression is also derived for the dependence of the local pressure losses on the temperature, which shows good agreement with the experimental data. Orig. art. has: 4 figures and 15 formulas.

SUB CODE: 20/ SUBM DATE: 02Jun66/ ORIG REF: 002/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 08/09/2001  
ACCESSION NR: AP5010093

UR/0109/65/010/004/0626/0634

AUTHOR: Volkov, A. S.

TITLE: Calculation of a magnetostriction transducer <sup>25</sup>

SOURCE: Radiotekhnika i elektronika, v. 10, no. 4, 1965, 625-634

TOPIC TAGS: magnetostriction transducer, ultrasonic transducer

ABSTRACT: A theoretical investigation is presented of magnetostriction transducers with a distributed coupling which excite millimeter and submillimeter traveling waves in a long thin sonic line (bar, strip, or tubing) damped at its ends. Only the transducers intended for linear-type operation, which is ensured by an initial constant-magnetic-field polarization of the sonic line, are considered, this field is longitudinal for compression waves and circular for torsional waves. Formulas are developed for the frequency characteristics of the transducer which connect the characteristics with the size of windings and line; the skin

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L 47060-65  
ACCESSION NR: AP5010093

effect and the electric-circuit resonance are taken into account. It is found that:  
(1) The above transducer is a nonminimum-phase-type device; its amplitude-frequency characteristic depends on the winding size while its phase-frequency characteristic depends only on the electric-circuit parameters; (2) The ratio of the winding length to the optimal wavelength can be found from the nomogram (figs 4 and 5) given in the article; (3) For evaluating magnetostriction materials to be used in transducers, formula 19 is offered. R. C. William's findings (IRE Trans., 1959, PGUE-7, 16) are criticized. Orig. art. has: 7 figures and 28 formulas.

ASSOCIATION: none

SUBMITTED: 13Mar64

ENCL: 00

SUB CODE: EC

NO REF SOV: 004

OTHER: 004

*ml*  
Card 2/2



VAL'SHTEYN, G.I., inzh.; VOLKOV, A.S.

Unsupported roof cap sets maintained in stock for short-term mining operations. Shakht. stroi. 7 no.3:25 Mr'63

(MIRA 17:7)

1. Karagandinskiy nauchno-issledovatel'skiy ugol'nyy institut (for Val'shteyn). 2. Kombinat Karagandaugol' (for Volkov).

L 23372-65 EWT(1)/FCC GW  
ACCESSION NR: AR5002522

S/0169/64/000/010/B044/B044

SOURCE: Ref. zh. Geofizika, Abs. 10B256

AUTHOR: Voikov, A. S.

TITLE: Hail storms in Tadzhikistan

CITED SOURCE: Sb. rabot Dushanbinsk. gidrometeorol. observ., vyp. 1, 1964, 52-60

TOPIC TAGS: meteorology, hail, hail storm

TRANSLATION: This paper discusses observational data on hail and the meteorological conditions favorable to it for the area of Tadzhikistan during the entire period of the operation of meteorological stations and posts. It has been established that elevation above sea level is not always of decisive importance with respect to the frequency of occurrence of this phenomenon. The principal factor involved in the distribution of hail storms is the orientation of mountain ranges relative to the prevailing air flow. The area with the highest frequency of hail storms is the Darvaza Range and the Gissar Valley (2-3 times a year). The maximum in the annual curve of the frequency of hail storms is in April-May. The frequency of hail storms in the Gissar Valley can be compared to that of eastern Georgia. In most cases, hail storms are observed in the afternoon and evening hours. The

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ACCESSION NR: AR5002522

duration of hail storms in most cases is 3-5 minutes; a duration of 20-30 minutes is less common. A day before the fall of hail here are large vertical air temperature gradients to a height of 4-5 km (about  $0.6-0.8^{\circ}/100\text{ m}$ ). In most cases, centers of hail activity move from the west and southwest to the east and northeast. The fall of hail is associated with intrusions of cold air. V. Sorokina.

SUB CODE: ES

ENCL: 00

Card 2/2

L 23373-65 EWT(1)/EWG(v)/FCC/EEC(t) GW

ACCESSION NR: AR5002524

S/0169/04/000/010/B044/B044

SOURCE: Ref. zh. Geofizika, Abs. 10B258

AUTHOR: Afanas'yeva, L. A.; Volkov, A. S.

TITLE: Haze in southwestern Tadzhikistan

CITED SOURCE: Sb. rabot Dushanbinsk. gidrometeorol. observ., vyp. 1, 1964, 42-52.

TOPIC TAGS: haze, atmospheric turbidity, aerosol, atmospheric visibility, dust storm, cold front, occluded front

TRANSLATION: This paper gives the frequency and distribution of haze in Tadzhikistan during the period 1956-1960. The maximum frequency of haze is observed in July and August; haze is a rare phenomenon in the cold half-year. The most common duration of haze is 1-2 days; the maximum duration during the considered period was 6 days. The maximum in the diurnal curve of the frequency of haze is between 0900 and 1900 hours local time. The diurnal variation of haze is the same as the diurnal variation of the wind. During haze, visibility ranges from several tens of meters to 4-10 km. The wind velocity at which transport of an advection haze is observed is  $\sim 8$  m/sec. In 75% of all cases the formation of haze is associated with cold intrusions from the west and northwest. On the surface synoptic chart:

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westerly intrusions over Central Asia appear as the passage of one or two parallel meridional cold fronts or occluded fronts accompanied by wind intensification and frequently by dust storms, a cloud cover and precipitation. When forecasting hazes it is necessary to take into account that the closer the planetary high-level frontal zone is situated to Central Asia, the greater is the development of haze in it and the poorer is the visibility in it. The authors list a number of criteria which can be used in forecasting haze. V. Sorokina.

SUB CODE: ES

ENCL: 00

Card 2/2

VOIKOV, A.S.

Armavir Combine is a major industrial chemical complex. Stak. 1  
ker. 21 no.1:40-41 Ja '64. (MIRA 17:8)

VOLKOV, A.S.; GALAVANOV, V.V.; RZAYEV, M.A.

Determining impurity concentrations in the p-layer of electron-hole transitions. Zav. lab. 30 no.10:1230-1232 '64. (MIRA 18:4)

1. Fiziko-tehnicheskij institut imeni Ioffe AN SSSR.

VOLKOV, A.S.; SHEVCHENKO, L.B.

Well deviation in diamond drilling in Canada; from the data of  
D.S. Robertson: "Some aspects of diamond drilling in the Blind  
River Camp". Canadian Mining Journal. Razved. i okh. nedr 29  
no.11:61-63 N '63. (MIRA 17:12)

VOLKOV, A.S.; SHEVCHENKO, L.B.

Calculating the profile of a multi-bottom hole. Razved. i ozh.  
nedr 30 no.4:25-29 Ap '64. (MIRA 17:12)

VOLKOV, Aleksey Trofimovich; NAKHIMSON, V.A., inzh., red.; UVAROVA,  
A.F., tekhn. red.; EL'KIND, V.D., tekhn. red.

[Repair of motor scooters] Remont motorollerov. Moskva, Gos.  
nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 294 p.  
(MIRA 14:9)

(Motor scooters—Maintenance and repair)

VOLKOV, A.T.; NIKITYUK, I.P.; METELKIN, V.V.; MAMONTOVA, O.K., red.;  
MOSKALENKO, A.V., red.; OVECHKINA, L.S., red.; FILATOVA, G.M.,  
tekhn. red.

[Mechanization of soybean cultivation and harvesting operations]  
Mekhanizatsiia vozdelevaniia i uborki soi. Blagoveshchensk,  
Amirskoe knizhnoe izd-vo, 1962. 143 p. (MIRA 15:5)  
(Soybean) (Agricultural machinery)

VOLKOV, Aleksey Trofimovich; SHUVALOV, Konstantin Ivanovich; IVANITSKIY,  
S.Yu., inzh., red.; LEZHNEVA, Ye.I., red.izd-va; UVAROVA, A.F.,  
tekhn.red.

[Motorscooters] Motorollery. Moskva, Gos.nauchno-tekhn.izd-vo  
mashinostroit.lit-ry, 1959. 255 p. (MIRA 12:3)  
(Motorscooters)

ZAYTSEV, I.M., inzh.; VOLKOV, A.T., inzh.; KOZMODEM'YANOV, Ye.A., kand.tkhn.  
nauk

Machinery for growing soybeans. Mekh. i elek. sots. sel'khoz. 19  
no.2:8-9 '61. (MIRA 14:3)

1. Amurskiy oblispolkom (for Zaytsev). 2. Blagoveshchenskiy  
sel'skokhozyaystvennyy institut (for Volkov and Kozmodem'yanov).  
(Soybean) (Agricultural machinery)

VOLKOV, B.K.

Hormone therapy in acute burns of the esophagus in children.  
Vest. otorin. 23 no. 2: 83-88 F '61. (MIRA 14:4)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. D.M.  
Rutenburg) Leningradskogo pediatricheskogo meditsinskogo  
instituta.

(ESOPHAGUS—WOUNDS AND INJURIES) (ACTH)  
(CORTISONE)

*Volkov, A.K.*

KRASIL'SHCHIKOV, P.P., and A.K. VOLKOV

Экспериментальное определение момента отрыва ламинарного пограничного слоя.  
Moskva, 1936. 24 p., table, diags. (TSAGI. Trudy, no. 254)

Summary in English.

Title tr.: Experimental determination of the breakaway point of a laminar boundary layer.

QA911.M65 no.254

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress,  
1955

CHALYK, D.A., inzhener; VOLKOV, A.K., kandid-t tekhnicheskikh nauk.

Shipbuilding at the All-Union Industrial Exhibition of 1956.  
Sudostroenie 22 no.9:25-36 S '56. (MIRA 10:1)  
(Moscow--Exhibitions) (Shipbuilding)

*VOLKOV, A.K.*

BOEROV, I.I., doktor tekhnicheskikh nauk; VOLKOV, A.K., kandidat tekhnicheskikh nauk.

Developing methods of preventing internal corrosion in tankers.  
Sudostroenie 23 no.3:58-60 Mr '57. (MLRA 10:5)  
(Tank vessels) (Corrosion and anticorrosives)

*Volkov, A. K.*

VOLKOV, A.K., kand. tekhn. nauk.

Technological Exhibition of the Ministry of the Shipbuilding  
Industry. Vest. mash. 37 no. 12:82-83 D '57. (MIRA 10:12)  
(Shipbuilding)

L 20213-65 EWT(m)/EWA(g)/EWP(t)/EWP(k)/EWP(b) PF-4 ASD(m)-3 JD/HH  
 ACCESSION NR: AP4049462 S/0117/64/000/011/0022/0025

AUTHORS: Pikhtovnikov, R. V. (Doctor of technical sciences); Volkov, A. I.

TITLE: Explosive forming of sheet metal

SOURCE: Mashinostroitel', no. 11, 1964, 22-25

TOPIC TAGS: explosive forming, sheet metal forming, metal forming

ABSTRACT: Explosive forming of sheet metal using different combustible products and fluids to transmit the forming energy is discussed briefly. Explosive forming using high energy explosives and water to transmit the blast wave is treated in more detail. The following working equations are given (without derivation) for an explosive-forming apparatus similar to the one shown in Fig. 1 on the Enclosure using protyl explosive: the pressure for a concentrated (spherical) charge is given by

$$P_m = 530 \left( \frac{1}{Q^3} \right)^{1.09} \text{ kg/cm}^2, \text{ [ke/cm}^2\text{]}$$

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for a linear charge by

$$P_m \approx 720 \left( \frac{1}{g^2} \right)^{0.72} \frac{\text{kg/cm}^2}{[\text{kg/cm}]^2}$$

(where G = charge weight in kg, g = weight per unit length in kg/m, R = distance from charge to metal blank). The pressure at a point as a function of time is

$$p = P_m e^{-t/\theta}$$

where

$$\theta = 0.97 \cdot 10^{-3} G^{\frac{1}{3}} \left( \frac{R}{g^2} \right)^{0.17} [\text{sec}] \quad \text{and} \quad \theta = 0.10 \cdot 10^{-3} g^{\frac{1}{2}} \left( \frac{R}{g^2} \right)^{0.5} [\text{sec}]$$

for a concentrated and linear charge respectively. In water, the energy transfer is given by

$$E_1 = 95 \frac{G}{R^2}, \quad E_1 \approx 186g^{\frac{1}{2}} \left( \frac{1}{R} \right)^{0.89}$$

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and the weight of the required explosive is

$$G = \left[ \frac{\alpha_F \delta_0 R^{1.8}}{1 - \nu^2} N \right]^{0.8} \sqrt{\text{kg}}; \quad q = \left[ \frac{\alpha_F \delta_0 R^{0.65}}{1 - \nu^2} M \right]^{0.8} \sqrt{\text{kg/m}}$$

where  $\alpha_F = A/F$ ;  $A$  = total deformation energy (cm);  $F$  = wetted surface of blank (cm<sup>2</sup>);  $\delta_0$  = thickness of metal sheet;  $N$  and  $M$  = coefficients depending on metal properties;  $\nu$  = wave reflection coefficient. A table of  $N$ ,  $M$  and  $V$  is presented. The total deformation energies  $A$  required for producing cylindrical and spherical shapes are derived in terms of geometrical parameters and a number of tabulated constants. Orig. art. has: 21 formulas, 7 figures, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: IE, MM

NO REF SOV: 000

OTHER: 000

Card 3/4

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ACCESSION NR: AP4049462

ENCLOSURE: 01

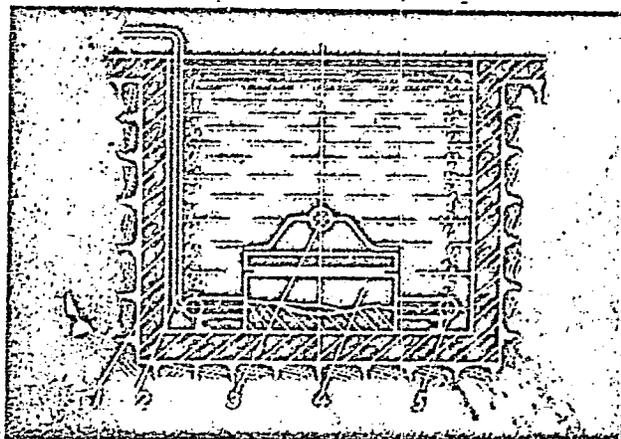


Fig. 1. Basin with bubble shield for the walls:

- 1- basin wall;
- 2- air tubing;
- 3- explosive;
- 4- die;
- 5- collector with perforations.

Cord 4/4

VOLKOV, Anatoliy Mikhaylovich; PIRIN, I.V., retsenzent; ZHDANOV, P.A.,  
retsenzent; KARPOVA, N.L., red.; VOROTNIKOVA, L.F., tekhn.  
red.

[Reducing the noise and vibrations of rolling stock] Umen'shenie  
shuma i vibratsii podvizhnogo sostava. Moskva, Vses. izdatel'sko-  
poligraf. ob"edinenie M-va putei soobshchenia, 1961. 62 p.  
(MIRA 14:10)

(Railroads—Rolling stock)

VOLKOV, A.M., uchitel' (Gorki Leninskiye Moskovskoy oblasti)

From the experience in conducting practical work on the  
fundamentals of stock farming. Biol.v shkole no.6:64-66  
N-D '59. (MIRA 13:3)  
(Stock and stockbreeding--Studying and teaching)

VOLKOV, A. M., Cand Tech Sci -- (diss) "Study of the <sup>use</sup> application of  
low-alloy steel EI603 for cutting instruments." Mos, 1957. 29  
18 pp incl cover (Min of Higher Education USSR, Mos Order of Lenin and  
Order of Labor Red Banner Higher Tech School im Bauman), 100 copies  
(KL, 17-58, 108)

- 33 -

VOLKOV, A.M.

HEAT TREATMENT 807/1598

Moscow, Gos. Mashino-Toolicheskoye Przemlye Im. V.I. Dzerzhinskogo  
Soyuzmashstroi sputnyik i im. V.I. Lenina (Contemporary Alloys and their  
Heat Treatment) Moscow, Mashgiz, 1958. 389 p. 12,000 copies printed.

Additional Sponsoring Agency: Otechestvo po razvoystvennyy politicheskoy i  
nauchoykh zadachy KHRU.

M. (Title page); Yu. A. Geller, Doctor of Technical Sciences; M. (Title book);  
V.V. Babitskiy, Engineer; Tech. Ed.: B.I. Kozlov, Managing Ed. for  
Literature on Metal Working and Tool Making) E.D. Kozlov, Engineer.

REMARKS: The book is intended for engineering and technical personnel of heat-  
treatment shops and test laboratories of machine-building plants.

SYNOPSIS: This collection of 28 articles, compiled by 35 authors, aims to acquaint  
the reader with modern practice in the heat treatment of steels. The authors  
are primarily concerned with the development of various types of structural,  
tool, and heat-resistant steels and with the use of their alloying elements.  
Materials-handling equipment is described at some length. The treatment of  
alloys, particularly those of titanium, also comes within the scope of the  
collection. The book is thoroughly diagrammed, and a good deal of the material  
is shown in graphical form. Along the problems dealt with are the minimiza-  
tion of deformation, the introduction of the automatic control of heat-  
treating equipment, together with fully automatic tool manufacture, and the  
optimal properties of different alloying elements. There are numerous tables  
and drawings. Bibliographic listings placed at the end of chapters are  
predominantly Soviet. The articles comprising this collection are reports  
delivered at a conference held in the Scientific and Technical Propaganda  
House (Imeni V.I. Dzerzhinskoy) in Moscow.

Contemporary Alloys and their Heat Treatment	807/1598
Parul'ina, Ye. O. Proper Selection of Steels for Case-hardened Parts	95
Gil'berg, V.F. Initial Data for Selecting Regimes for the Carburizing and Heat-treatment of Case-hardened Parts	104
Balitskiy, A.F. A Modern Carburizing Agent for Gas Carburizing and Cyaniding	116
Babitskiy, A.O., O.J. Koshchikov, and V.V. Zil'ber. Properties and Heat-treatment of Ni-co-alloyed Spring Steels	138
Geller, Yu. A. Improvements in the Composition and Heat Treatment of Tool Steels	149
Volkov, A.M. An Investigation of E605 Low-alloy Steel as a Material for Cutting Tools	171
Yakov, A.O. New Types of High-speed Steel	175
Sokolov, O.J. Hardening and Tempering of High-speed Steels With Inhibition Milling	178
Card 4/6	

SOV/137-58-9-20022 D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 275 (USSR)

AUTHOR: Volkov, A.M.

TITLE: An Investigation of the Use of Low Alloy EI 603 Steel for Cutting Tools (Issledovaniye primeneniya nizkolegirovannoy stali EI 603 dlya rezhushchikh instrumentov)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Mosk. vyssh. tekhn. uch-shche im. N.E. Baumana (Moscow Higher Technical School im. N.E. Bauman), Moscow, 1957

ASSOCIATION: Mosk. vyssh. tekhn. uch-shche im. N.E. Baumana (Moscow Higher Technical School im. N.E. Bauman), Moscow

1. Cutting tools--Materials    2. Steel alloys--Properties

Card 1/1

VOLKOV, A. M.,

"Investigation of the Application of the Low Alloy Steel EI603 for Cutting Tools,"  
Moscow, 1957, MVTU. (Dissertation presented and approved for a degree of cand.  
tech. sci.).

*001-11-11, M.*  
VOLKOV, A.M., kand.med.nauk

~~Simple noise-reducing chamber.~~ Vest.oto-rin. 20 no.1:107 Ja-F '58.  
(MIRA 11:3)

1. Iz 'Sentral'noy nauchno-issledovatel'skoy laboratorii gigiyeny i  
epidemiologii Ministerstva putey soobshcheniya, Moskva.

(HEARING TESTS,

light type of noise-reducing room (Rus)

(NOISE

noise-reducing room, light type, for diag. of hearing  
disord. (Rus)

VOLKOV, A.M.

Practical work for students in stockbreeding on a collective farm  
near Moscow. Politekh.obuch. no.8:41-43 Ag '57. (MIRA 10:9)

1. Srednyaya shkola pamyati V.I.Lenina, Gorki-Leninskiye, Moskovskoy  
oblasti.

(Stock and stockbreeding--Study and teaching)

SAMARIN, D.A.; ARKHANGEL'SKIY, V.V., red.; VOLKOV, A.M., red.; KLYKOV, A.A.,  
red.; RUDIN, M.Z., red.; KHERSONSKIY, Kh.N., red.; SHEYMIN, L.R.,  
red.; SHAVERDOVA, A.I., red.; MANINA, M.P., tekhn.red.

[The angler; almanac] Rubolov - sportsmen; almanakh. Moskva, Gos.  
izd-vo "Fizkul'tura i sport." Vol.11. 1959. 270 p.

(MIRA 14:3)

(Fishing)

CHOCHIA, N.G.; BELYAKOVA, Ye.Ye.; BOROVSKAYA, I.S.; VOLKOV, A.M.; GRAYZER, M.I.;  
IL'INA, Ye.V.; KAZAKOV, I.N.; KIRKINSKAYA, V.N.; KISLYAKOV, V.N.;  
KRASIL'NIKOV, B.N.; MAYMINA, L.G.; OSIPOVA, N.A.; RADYUKEVICH, L.V.;  
ROMANOV, F.I.; KULIKOV, M.V., red.; DOLMATOV, P.S., vedushchiy red.;  
YASHCHURZHINSKAYA, A.B., tekhn. red.

[Geology, and oil and gas potentials of the Minusinsk Lowland]  
Geologicheskoe stroenie Minusinskih mezhgornykh vpadin i  
perspektivy ikh nefte-gazonosnosti. Leningrad, Gos.nauchn.  
tekh.n.izd-vo nef. i gorno-toplivnoi lit-ry Leningr. otd-nie,  
1958. 288 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledo-  
vatel'skii geologorazvedochnyi institut. Trudy, no.120)

(MIRA 12:5)

(Minusinsk Lowland--Petroleum geology)  
(Minusinsk Lowland--Gas, Natural--Geology)

VOLKOV, A.M.; SOKOL'SKAYA, I.D.

New technological processes for preparing surgical apparatus and instruments. Trudy NIIKHAI no.5:317-323 '61. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgi-cheskoy zpparatury i instrumentov.  
(SURGICAL INSTRUMENTS AND APPARATUS)

VOLKOV, A.M.

Effect of sharpening and of the metalworking instruments [used]  
on the durability of surgical scalpels. Trudy NIIEKHAI no.5:324-330  
'61. (MIRA 15:8)

(SURGICAL INSTRUMENTS AND APPARATUS---MAINTENANCE AND REPAIR)

VOLKOV, A.M.

Increasing the cutting properties of scalpels by means of small admixtures to the steel of chromium and manganese. Trudy NIIKHAI no.5:331-341 '61. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.  
(SURGICAL INSTRUMENTS AND APPARATUS) (STEEL--TESTING)

VOLKOV, A.M. .

Experimental investigation on the regimen of lessons in vocational training of adolescents. Gig. sanit., Moskva no.2:39-44 Feb 52.  
(CIML 21:5)

1. Of the Division of Physiology, Central Scientific-Research Laboratory of Hygiene and Epidemiology, Ministry of Ways of Communication USSR.

VOLKOV, A. M.

"The Program of Industrial Training and the Development of Work Habits  
in Students of Railroad Schools." Cand Med Sci, First Moscow Order of  
Lenin Medical Inst, 15, Nov 54. (VM, 4 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

VOLKOV, A.M.

Experience in organizing a physiological laboratory for  
research in hygiene. Gig. i san. 21 no.2:58-59 F '56. (MLRA 9:6)

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii gigiyeny  
i epidemiologii Ministerstva putey soobshcheniya SSSR (TSNILGE)  
(LABORATORIES, MEDICAL  
physiol. laboratories for research in hygiene, organiz.)

KUZNETSOV, O.D.; VOLKOV, A.M.

Apparatus for studying the efforts of filers. Gig. i san. 21 no.9:  
(MLRA 9:10)  
71-73 & '56.

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii gigiyeny i  
epidemiologii Ministerstva putey soobshcheniya SSSR.

(MUSCLES, physiol.

determ. of stress in filers with special apparatus)

VOVKOV, A. M.

"Investigation of Certain Materials for Mechanical Suture,"  
by Ye. N. Bolkhovitinova and A. M. Volkov, Scientific  
Research Institute of Experimental Surgical Apparatus and  
Instruments, Meditsinskaya Promyshlennost' USSR, No 2, Feb 57,  
pp 41-45

Tantalum wire is used in the manufacture of staples for mechanical sutures because it does not react with human tissues. "However, no one up to now has thoroughly studied the mechanical properties of tantalum wire with respect to the specific working conditions of the staples." Because of the high cost of tantalum, the authors have attempted to find a substitute.

Both tantalum and chrome-nickel stainless steel were subjected to mechanical tests and compared. Chrome-nickel stainless steel was also subjected to a biological corrosion test.

The investigators succeeded in making staples from heat-treated stainless steel which had the same mechanical properties as tantalum.

In animals subjected to vascular suture with the stainless-steel staples the tissue reaction for periods up to 25 days was identical to the tissue reaction to tantalum. (U)

SUM. 1360

VOLKOV, A.M.

Effect of heat treatment and sharpening on the durability of  
cutting instruments. Med. prom. 11 no.3:40-44 Mr '57  
(MLRA 10:4)

1. Nauchno-issledovatel'skiy institut eksperimental'noy  
khirurgicheskoy apparatury i instrumentov.  
(SURGICAL INSTRUMENTS AND APPARATUS) (CUTTING TOOLS)

BOLKHOVITINOVA, Ye.N.; VOLKOV, A.M.; ROSTOVTSOVA, F.N.

Gradual tempering of surgical instruments made from stainless steel.  
Med.prom. 11 no.7:32-37 J1 '57. (MLRA 10:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov  
(SURGICAL INSTRUMENTS AND APPARATUS)  
(TEMPERING)

Bolkhovitina, E. N., Volkov, A. M., and Petrova, N. P.

"The use of K4ONKhM alloy in surgery." Novye khirurgicheskie apparaty i instrumenty i opyt ikh primeneniya, No. 2, 1958, p. 97

Bolkhovitina, E. N., and Volkov, A. M.

"Steel for detachable scalpel blades." Novye khirurgicheskie  
apparaty i instrumenty i opyt ikh primeneniya, No. 2, ~~1962~~, p. 101  
1958

Volkov, A. M.

"The use of Kh 14 steel for screws of surgical instruments."  
Novye khirurgicheskie apparaty i instrumenty i opyt ikh primeneniya,  
No. 2, ~~1961~~, p. 104  
1958

VOLKOV, A.M.

BOLKHOVITINOVA, Ye.N.; ~~VOLKOV, A.M.~~

Bright hardening of scalpels. Med.prom.SSSR 12 no.5:43-45 My '58.

(MIRA 11:5)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.

(SURGICAL INSTRUMENTS AND APPARATUS) (STEEL--HARDENING)

BOLKHOV PIINOVA, Ye.N., VOLKOV, A.M., PETROVA, N.P.

Use in surgery of items made from alloy K40NkhM. Med.prom. 12  
no.6:9-12 Je '58 (MIRA 11:6)

1. Nauchno-issledovatel'skiy institut eksperimental'noy  
khirurgicheskoy apparatury i instrumentov.  
(SURGICAL INSTRUMENTS AND APPARATUS)

VOLKOV, A. M.

"Effect of noise and general vibration on the human organism under conditions of railway transport rolling stock."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

VOLKOV, A.M.; BELAVIN, N.F.

Technology of preparing a case lock. Med.prom. 31 no.10:51-52  
0 '59.

(MIRA 13:2)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgiche-  
skoy apparatury i instrumentov.

(SURGICAL INSTRUMENTS AND APPARATUS)

VASIL'YEV, V.M.; AVILOV, A.A.; ALMAZOV, A.D.; BALASHOV, A.V.; VOLKOV, A.M.;  
YELIZAROV, H.G.; LAPUTIN, A.Ya.; RYABOV, V.M.; SABUNAYEV, V.B.;  
SAMARIN, D.A.; SUETIN, V.A.; KHERSONSKIY, Kh.H.; TSETEL'MAN, F.Y.;  
GORBACHEVA, N.A., red.; TRIPOL'SKIY, L.G., red.; MANINA, M.P.,  
tekhn.red.

[The angler's reference book] Nastol'naya kniga rybolova-sportsmena.  
Moskva, Gos.izd-vo "Fizkul'tura i sport," 1960. 237 p.  
(Fishing) (MIRA 14:1)

VOLKOV, A.M.; CHIRKOV, V.Ya. (Moskva)

Oscillations of the human body under the influence of vibrations.  
Gig. truda i prof. zab. 4 no.5:8-12 My '60. (MIRA 13:9)  
(VIBRATION--PHYSIOLOGICAL EFFECT)

BOLKHOVITINOVA, Ye.N.; VOLKOV, A.M.

Light metal alloys for the parts of surgical apparatus. Med. prom.  
SSSR 14 no.12:31-34 D '60. (MIRA 13:12)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy  
apparatury i instrumentov.  
(LIGHT METALS) (SURGICAL INSTRUMENTS AND APPARATUS)

K&EZOVSIIY, Ye.Ya.; VOIKOV, A.M.

Determination of the frequency characteristics of a.c. machines  
with fixed rotor taking into account d.c. fading in the stator  
winding. Sbor. rab. po vop. elektromekh. no.10:192-198 '63.  
(MIRA 17:8)

VOLKOV, A.M.

Determination of the frequency characteristics of a.c. machines having fixed rotors with consideration of d.c. fading in the stator winding using piece-wise exponential representation of the fading curve. Sbor. rab. po vop. elektromekh. no.10:190-217 '63. (MIRA 17:8)

KAZOVSKIY, Ye. Ya., doktor tekhn. nauk; KASHAPENIY, N.G., kand. tekhn. nauk;  
VILKOV, A.M., inzh.

Determination of the frequency characteristics of turbogenerators.  
Elektrotehnika 35 no.5:1-6 by'64 (MIRA 17:8)

ANTOSHINA, N.V.; ASTAF'YEV, G.V.; BABKIN, S.I.; BELAVIN, N.F.;  
BELEN'KIY, V.A.; BEREZIN, I.P.; BOBRC, B.S.;  
VOLKOV, A.M.; GRITSMAN, Yu.Ya.; KUKUSHKIN, L.I.; PEREP'ELKIN,  
V.P.; PETROVA, N.P.; GESELEVICH, A.M., red.; DEKHTYAR', Ye.G.,  
red.

[New surgical apparatus and instruments; a practical manual  
for physicians, students of senior courses at medical insti-  
tutes and surgical nurses] Novye khirurgicheskie apparaty i  
instrumenty; prakticheskoe rukovodstvo dlia vrachei, studen-  
tov starshikh kursov meditsinskikh institutov i operatsion-  
nykh sester. Moskva, Meditsina, 1964. 253 p.

(MIRA 18:3)

L 29377-66

ACC NR: AP6018227

(N)

SOURCE CODE: UR/0391/66/000/006/0028/0032

AUTHOR: Volkov, A. M.

27  
B

ORG: Institute of Railroad Hygiene (Institut zheleznodorozhnoy gigiyeny)

TITLE: The effect of railroad rolling stock vibrations on vestibular chronaxie

SOURCE: Gigiyena truda i professional'nyye zabolevaniya, no. 6, 1966, 28-32

TOPIC TAGS: human physiology, central nervous system, vestibular analyzer, vestibular chronaxie, vibration biologic effect

ABSTRACT: Thirty-year-old subjects were studied to determine the change in the functional state of the vestibular analyzer <sup>2</sup>resulting from vertical and horizontal vibration. The system shown in Fig. 1, was used. To test vestibular chronaxie, a subject

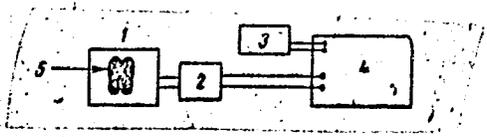


Fig. 1. System used to determine vestibular chronaxie

1 - Electric stabilizing bridge; 2 - tensometric amplifier; 3 - chronaximeter; 4 - loop oscillograph; 5 - positioning of feet.

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UDC: 612.886.014.45+613.644:656.2

L 29377-66

ACC NR: AP6018227

stood on the platform of the stabilizing bridge with feet together and eyes closed. The active electrode was placed in the hollow of the tragus and the passive electrode was attached to the hand on the same side as the active electrode. Contacts connected to the loop oscillograph were attached to the stimulus switch. When the stimulus markers coincided with increased oscillations, the electrical stimulus was judged to be sufficient for excitation of the vestibular nerve and thus the response of the vestibular analyzer to the given stimulus occurred. The influence of vibrations typical of those created by locomotives and rolling stock was tested using a vibration device (vertical vibration—4 cps, amplitude— $\pm 3.2$  mm; horizontal vibration—1.5 cps, amplitude— $\pm 15$  mm). The individual and combined influences of these parameters were tested. The duration of exposure was 1 hr. The rheobase and chronaxie were determined before, directly after, and 5, 10, 20, and 30 min after exposure to vibration, noise from the vibration stand, or exposure to control conditions. Control subjects showed a prolongation of chronaxie immediately after testing which truncated after 10 min. Thirty minutes later chronaxie normalization took place. Substantial truncation of chronaxie was noted in subjects exposed to noise from the vibration stand with normalization taking place 30 min after exposure. Differences in chronaxie before and after exposure to noise could not be demonstrated statistically. A truncation of chronaxie occurring directly after exposure to vibration was found to increase as a function of vibration intensity. The period of reestablishment of chronaxie was found to increase. The tabular data showed a statistically reliable difference

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L 29377-66

ACC NR: AP6018227

between control values and those obtained after exposure to vibration. The long period of chronaxie reestablishment was attributed to the possible accumulation of fatigue in response to prolonged or repeated exposure to vibration. In general, it was felt that the use of the stabilizing bridge ("stabilography") in a vestibular chronaximetry system yielded reliable data on the excitability and lability of the vestibular nerve. Orig. art. has: 1 figure and 1 table. [LS]

SUB CODE: 06/ SUBM DATE: 11Sep65/ ORIG REF: 004/ ATD PRESS: 5009

Card 3/3

cc

SHKOL'NIKOV, S.N.; VOLKOV, A.M.

Fusibility diagrams of the system  $ZnO - CrCl_2$ . *Izv. vys.*  
ucheb. zav.; tsvet. met. 7 no.6:82-83 '64.

(MIRA 18:3)

1. Leningradskiy politekhnicheskii institut, kafedra elektro-  
pirometallurgii tsvetnykh metallov.

VOLKOV, A.M.

Some results of gas and hydrochemical studies in the northeastern part of the West Siberian Plain. Trudy SNIIGGIMS no. 27:72-78 '62. (MIRA 16:9)

1. Krasnoyarskoye territorial'noye geologicheskoye upravleniye. (West Siberian Plain--Gas, Natural--Geology)

KOSTENKO, M.P., akademik (Leningrad); KAZOVSKIY, Ye.Ya., doktor tekh.nauk  
(Leningrad); VOLKOV, A.M., inzh. (Leningrad); PAN' TSZI, [P'an Chi],  
inzh. (Leningrad)

Methodology for determining the frequency characteristics of an a.c.  
machine. Elektrichestvo no.12:1-7 D '62. (MIRA 15:12)  
(Electric machinery—Alternating current)

VOLKOV, A.M.

Some features of the geology of the Yenisey Valley portion of  
the West Siberian Plain. Trudy SNIIGGIMS no.14:3-8 '61.  
(MIRA 15:8)  
(Yenisey Valley--Geology, Structural)

VOLKOV, A.M.; KANDAUROVA, Ye.I.; RUMYANTSEV, G.I.

Experimental study of the effect of general vibrations on the organism.  
Uch. zap. Mosk. nauch.-issl.inst.san. i gig. no.7:10-13 '60.

(MIRA 15:2)

(VIBRATION\_\_PHYSIOLOGICAL EFFECT)

VOLKOV, A.M. (Moskva)

Determining the physical and mental strain of work. Gig. truda  
i prof. zab. 4 no.11:10-13 N '60. (MIRA 15:3)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya  
gigiyeny i epidemiologii Ministerstva putey soobshcheniya  
SSSR.

(STRESS (PHYSIOLOGY))  
(WORK)

SULTANOV, T.A.; VOLKOV, A.M.

Use of vibration compression in the medical industry. Med. prom.  
15 no.12:54-56 D '61. (MIRA 15:2)

1. Nauchno-issledovatel'skiy institut eksperimental'noy, khirurgicheskoy  
apparatury i instrumentov.  
(DRUG INDUSTRY EQUIPMENT AND SUPPLIES) (VIBRATION)

S/149/62/000/002/003/008  
A006/A101

AUTHORS: Shkol'nikov, S. N., Volkov, A. M.

TITLE: Fusibility diagram of the  $KCl-CrCl_3$  system

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya,  
no. 2, 1962, 65-66

TEXT: The authors studied the  $KCl-CrCl_3$  system by the method of thermal analysis within a range of 400 - 900°C. The investigation was made with chemically pure  $KCl$  and dehydrated  $CrCl_3$ . To prevent changes in the composition of the initial melts during their melting, the mixtures were placed in a quartz container which was sealed after the air had been evacuated. Prior to plotting the cooling curve, the container with the molten batch was shaken. A fusibility diagram of the system was plotted up to 40 mol.%  $CrCl_3$ . In the range investigated, two eutectic points were revealed with 11.2 and 33.6 mol.%  $CrCl_3$ . Their crystallization temperatures are 692 and 768°C respectively. A stable chemical compound,  $3KCl \cdot CrCl_3$  was revealed. There are 2 figures and 5 non-Soviet-bloc references.

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S/149/62/000/002/003/008  
A006/A101

Fusibility diagram of the  $KCl-CrCl_3$  system

ASSOCIATIONS: Leningradskiy politekhnicheskiiy institut (Leningrad Polytechnic  
Institute); Kafedra elektroprometallurgii tsvetnykh metallov  
(Department of Electric Pyrometallurgy of Non-Ferrous Metals)

SUBMITTED: September 5, 1960

Card 2/2

SHKOL'NIKOV, S.N.; VOLKOV, A.M.

Solubility diagram of the system  $KCl - CrCl_3$ . Izv. vys. ucheb. zav.;  
tsvet. met. 5 no.2:65-66 '62. (MIRA 15:3)

1. Leningradskiy politekhnicheskiy institut, kafedra elektropiro-  
metallurgii tsvetnykh metallov.  
(Chromium compounds--Thermal properties) (Solubility)

VOLKOV, A.M.

Noise control of the rolling stock. Zhel. dor. transp. 43 no. 7:28-31  
Jl '61. (MIRA 14:7)

1. Rukovoditel' sektora psikhic-fiziologii truda Vsesoyuznogo nauchno-  
issledovatel'skogo instituta zheleznodorozhnoy gigiyeny Ministerstva  
putey soobshcheniya (VNIIZhG).  
(Railroads--Rolling stock--Noise)

7/61/761/018, 011/017/0  
E075/0555

1. TITLE: bolensavimove, A.N. and Golikov, A.M.  
2. SUBJECT: light alloys for components of surgical implements  
3. SOURCE: Chemie a chemická technologie; Přehled technické a  
hospodářské literatury, v. 18, no. 11, 1961, 521  
abstract chbt-7207 (Sov. Prom. 11, No. 12, 51-54, 1960)  
TEXT: The authors propose casting of components of surgical  
implements from soviet grades of aluminium and titanium alloys  
this will permit reducing the weight of the implements without  
impairing their operating characteristics. As a final surface  
treatment nickel coating is applied.  
2 photographs, 1 table.

[ English is not complete translation ]

card 1/1

VOLKOV, A. N.

Volkov, A. N. Handbook on the Control of Pests and Diseases of Farm Crops, State Publishers of Agricultural Literature, Moscow, 1948, 502 pp. 464.4 V88

So: SIRA SI - 90-53, 15 Dec., 1953

VOLKOV, A. N.

Volkov, A. N. "Protection of Tree and Shrub Seeds from Pests and Diseases," Sovetskaia Agronomiia, vol. 8, no. 10, 1950, pp. 83-88. 20 So84

So: SIRA SI - 90-53, 15 Dec., 1953

USSR/Biology - Weevils, Bean  
Insecticides

Sep 50

"Development of Chemical Means of Controlling Bean Weevils in Storage Conditions," A. N. Volkov, A. N. Chudinova, All-Union Sci Res Inst for Protection of Plants, Moscow Sta

"Dok v-s Ak Selkhoz Nauk" No 9, pp 36-41

17116  
Tests and tabulates effectiveness and duration of effect of selection of powdered fumigating prepn in eliminating bean weevils from seeds in store-houses. Prepn include paradichlorbenzene, naphthalene, and hexachlorethane undiluted and as 7 %

17116

USSR/Biology Weevils, Bean (Contd)

Sep 50

dust with talc, hexachlorane and DDT as 7 % talc dust, and Gesarol as 5 % dust. Also include combination of hexachlorocyclohexane with hexachloroethane, and combination of hexachlorocyclohexane with DDT in 7 % talc dust. Two tables. Submitted 3 Mar 50.

17116

VOLKOV, A. N.

VOLKOV, A. H.

Volkov, A. N. Manual on the Control of Pests and Diseases of Agricultural Crops, State Publishers of Agricultural Literature, Moscow, 1951, 471 pp. 464.4 V88 Ed. 7

So: SIRA SI - 90-53, 15 Dec., 1953

VOVKOV, A. N.

Protection of ornamental and shade trees. Zashch. rast. ot vred.  
1 bol. 3 no.1:14-17 Ja-F '58. (MIRA 11:3)

1. Nachal'nik Moskovskoy oblastnoy stantsii zashchity zelenykh  
nasazhdeniy.  
(Trees--Diseases and pests)

VOLKOV, A.N.; MAMAYEV, K.A.

The green patrol. Biol.v shkole no.6:67-69 N-D '59.  
(MIRA-13:3)

1. Chleny Vserossiyskogo obshchestva sodeystviya okhrane  
prirody i ozeleneniyu naselenykh punktov (g.Moskva).  
(Wild life, Conservation of)  
(Landscape gardening)

VOLKOV, Aleksandr Nikolayevich; GERASIMOV, B.A.; ZARING, P.V.; MUSHNIKOVA,  
K.S.; NIKIFOROV, A.M.; PROKOPENKO, S.F.; POPOV, S.D.; CHUVAKHIN,  
V.S.; MINEIKOVA, V.R., red.; GOR', Z.D., tekhn red.; GUREVICH,  
M.M., tekhn.red.

[Manual on controlling pests and diseases of farm crops] Posobie  
po bor'be s vrediteliami i bolezniami sel'skokhoziaistvennykh  
kul'tur. Izd.10, ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry,  
1960. 615 p. (MIRA 13:11)

(Agricultural pests)

(Plant diseases)

L 13005-65 EWT(d)/EWP(1)/EED-2 P-4/Pq-4/Pg-4/Pk-4 IJP(z) BB/GC  
ACCESSION NR: AR4039895 S/0058/64/000/004/A029/A030

AUTHORS: Shtranikh, I. V.; Bochkarev, V. N.; Volkov, A. N.; Klafu-  
kov, A. M.

SOURCE: Ref. zh. Fiz., Abs. 4A302

TITLE: Multidimensional TsIRU recording system

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radio-  
elektronike. T. 2. Ch. 2. M., Gosatomizdat, 1963, 115-143

TOPIC TAGS: digital recording system, <sup>160</sup> pulse height analyzer, pulse  
time analyzer, magnetic drum memory, binary coding

TRANSLATION: Data are reported on the TsIRU centralized measuring  
and recording unit (CMRU) developed jointly by the Lebedev Institute  
and by the OIYaI. This system was designed for the registration of  
four independent 64 x 64 multidimensional spectra with capacity of

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L 13005-65

ACCESSION NR: AR4039895

10,000 pulses per channel, and simultaneous registration of two 256-channel pulse-height and four time spectra, the capacity of each channel also being 10,000 pulses. The CMRU memory block is a magnetic drum device. This magnetic memory contains more than 80 heads and has a peripheral resolution of  $\sim 4 \times 10^3$  writing pulses (2.7 pulses per mm of length). The number of drum revolutions is 25 per second. By employing preliminary memorization of the incoming pulses (in code form) and a system for selecting the next necessary address, it is possible to write in each drum sector up to 25 statistically distributed pulses per second. Methods of reducing the dead time of the system during the registration of spectra are discussed. The average recording time can be reduced to 10  $\mu$ sec. The operating speed of the system is ensured by using an "equalization of the statistics" method. One of the features of this system is coding of the incoming parameters in binary form, which is then processed prior to obtaining the final results. Another distinguishing feature is the possibility of preliminary determination of the

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L 13005-65  
ACCESSION NR: AR4039895

necessary address in the ferrite type buffer memory system connected ahead of the recording circuits of the drum. A block diagram of the CMRU is presented, and variants of its operation for registration of multidimensional spectra and realization of multichannel measurements are discussed in detail. M. Vishnevskiy.

SUB CODE: DP, NP

ENCL: 00

Card 3/3

I. 14015-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6 IJP(c) WW/EM

ACC NR: AP6002628

SOURCE CODE: UR/0258/65/005/006/1117/1121

AUTHOR: Volkov, A. N. (Moscow)

ORG: none

TITLE: On constructing an approximate theory of membrane shells based on the method of asymptotic integration of equations of elasticity theory 2/

SOURCE: Inzhenernyy zhurnal, v. 5, no. 6, 1965, 1117-1121

TOPIC TAGS: membrane stressed shell , membrane stress, membrane shell, membrane shell theory

ABSTRACT: A method of asymptotic integration of equations of the theory of elasticity proposed by A. L. Gol'denveyser (PMM, v. 27, 1963) for constructing an approximate theory of membrane-stressed shells (without using the Kirchhoff-Love hypothesis) is further developed. The system of homogeneous differential equations of equilibrium from the theory of elasticity, Cauchy relationships, and Hooke's law written in curvilinear orthogonal coordinates are used as the initial equations. The method of asymptotic integration is reduced to construction of the basic iterative process with integration of the initial equations with respect to the shell thickness, thus reducing the three-dimensional problem of the theory of elasticity to a plane problem. The construction of two approximations (zero and first) of the iteration process is discussed.

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UDC: 539.311

L 14015-66

ACC NR: AP6002628

D

the latter introducing a correction which accounts for the thickness of the shell. First-approximation formulas are derived for determining the displacements and membrane stresses in the shell, and the necessity of distinguishing whether (unlike the case of the classical theory of membrane shells) the surface loading is applied to the outer, middle, or inner surface of the shell is pointed out. Orig. art. has: 16 formulas. [VK]

SUB CODE: 20/ SUBM DATE: 16Mar64/ ORIG REF: 007 ATD PRESS: 4196

Card 2/2 *BA*

VOLKOV, A.N., inzh.; LYADSKIY, V.B., kand. tekhn. nauk; TESHAYEV, S.T., inzh.

Austenitic manganous cast iron. lit. proizv. no.1:8-9 Ja '66.  
(MIRA 19:1)

VOLKOV, A.N.; BOGDANOVA, A.V.; KUGATOVA-SHEMYAKINA, G.P.

Synthesis of divinyl- $\alpha$ -diketones and dialkoxyethyl vinyl ketones.  
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